

## CLAIMS

1. A cosmetic hair composition comprising solid particles in a cosmetically acceptable medium, characterized in that it also comprises at least one adhesive polymer chosen such that the material resulting from the drying of this or these adhesive polymer(s) in the cosmetically acceptable medium has a detachment profile defined by at least one maximum detachment force  $F_{\max}$  of greater than 1 N.
2. The composition as claimed in claim 1, characterized in that the maximum detachment force  $F_{\max}$  is the maximum tensile force, measured using an extensometer, needed to detach the 38 mm<sup>2</sup> surfaces of two respective rigid, inert, nonabsorbent supports (A) and (B), placed facing each other; said surfaces being precoated with a formulation consisting of the adhesive polymer(s) in the cosmetically acceptable medium, at a rate of 53/c  $\mu\text{g}/\text{mm}^2$ , dried for 24 hours at 22°C, under a relative humidity of 50%, and then subjected for 20 seconds to a compression of 3 newtons and finally subjected for 30 seconds to a tension at a speed of 20 mm/minute, c being the concentration of solids in the formulation consisting of the adhesive polymer(s) in the cosmetically acceptable

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medium, expressed in grams per gram of composition.

3. The composition as claimed in claim 2, characterized in that the supports (A) and (B) consist of polyethylene, polypropylene, metal alloy or glass.
4. The composition as claimed in any one of the preceding claims, characterized in that the maximum detachment force  $F_{\max}$  is greater than 2.5 N.
5. The composition as claimed in any one of the preceding claims, characterized in that the material resulting from the drying of this or these adhesive polymer(s) in the cosmetically acceptable medium has a glass transition temperature ( $T_g$ ) of less than  $+10^{\circ}\text{C}$  and has a detachment profile defined by at least:
  - (a) a maximum detachment force  $F_{\max} > 1$  newton, and
  - (b) when said temperature  $T_g$  is less than  $-15^{\circ}\text{C}$ , by a separation energy  $E_{(M/V)}$  of the material placed in contact with a glass surface, of less than  $300 \mu\text{J}$ .
6. The composition as claimed in claim 5, charac-

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terized in that the separation energy  $E_{(M/V)}$  is the energy supplied by the extensometer to separate  $38 \text{ mm}^2$  surfaces of two respective rigid, inert, nonabsorbent supports (C) and (D) placed facing each other, one of said supports consisting of polished glass and the other of said supports being of identical nature to the supports (A) and (B) defined above and whose surface is coated with the formulation of solids concentration  $c$ , at a rate of  $53/c \text{ } \mu\text{g}/\text{mm}^2$  on the support, dried for 24 hours at  $22^\circ\text{C}$  under a relative humidity of 50%; the two surfaces of said supports (C) and (D) then being subjected for 20 seconds to a compression of 3 newtons and finally subjected for 30 seconds to a tension at a speed of 20 mm/minute,  $c$  being the concentration of solids in the formulation, in grams per gram of composition.

7. The composition as claimed in claim 6, characterized in that the energy supplied by the extensometer is the work calculated by means of the following formula:

$$\int_{X_{s1} - 0.05}^{X_{s2}} F(x) dx$$

in which  $F(x)$  is the force required to produce a displacement  $(x)$ ;

$X_{s1}$  is the displacement (expressed in millimeters)

produced by the maximum tensile force;  
 $X_{s2}$  is the displacement (expressed in millimeters)  
produced by the tensile force that allows the  
total separation of the two surfaces of the  
supports (C) and (D) defined above.

8. The composition as claimed in any one of the preceding claims, characterized in that the solid particles are chosen from the group comprising flakes, platelets, leaflets, fibrils and powders.
9. The composition as claimed in any one of the preceding claims, characterized in that the particles have a size of less than 1 mm, and preferably a size of less than 100  $\mu\text{m}$  or even more preferentially a size of less than 30  $\mu\text{m}$ .
10. The composition as claimed in any one of the preceding claims, characterized in that the relative weight concentration of adhesive polymer is between 0.05% and 30%, more preferentially between 0.1% and 20% and even more preferentially between 0.2% and 10%.
11. The composition as claimed in any one of the preceding claims, characterized in that the relative weight concentration of solid particles is between 0.1% and 50%, more preferentially between

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12. The composition as claimed in any one of the preceding claims, characterized in that it also comprises an organic solvent chosen from the group comprising C<sub>1</sub> to C<sub>4</sub> alcohols such as ethanol or isopropanol, C<sub>5</sub> to C<sub>10</sub> alkanes, acetone, methyl ethyl ketone, methyl acetate, butyl acetate, ethyl acetate, dimethoxyethane and diethoxyethane, and mixtures thereof.
13. The composition as claimed in any one of the preceding claims, characterized in that it also contains common cosmetic additives chosen from reducing agents, for instance thiols, silanes, for instance aminopropyltriethoxysilane, fatty substances, thickeners, softeners, antifoams, moisturizers, antiperspirants, basifying agents, colorants, fragrances, preserving agents, surfactants, fixing or nonfixing polymers, volatile or nonvolatile silicones, especially anionic silicones, polyols, proteins and vitamins.
14. The composition as claimed in any one of the preceding claims, characterized in that it is packaged in an aerosol device.

15. A cosmetic hair process, characterized in that a composition as defined in claims 1 to 14 is applied to the hair.
16. The use of a composition as claimed in any one of claims 1 to 14, in the manufacture of a styling, coloring, sheen or conditioning composition for the hair.
17. A cosmetic hair product, characterized in that it comprises a composition as claimed in any one of claims 1 to 14.
18. The product as claimed in claim 17, characterized in that it is a hairstyling product.
19. The product as claimed in claim 17, characterized in that it is a product intended to give the hair sheen.
20. The product as claimed in claim 17, characterized in that it is a product intended to give the hair coloring effects.

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